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Sandvik, Kjetil; Arvidsson, Adam Erik

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Gameplay as design: uses of computer players' immaterial labour

Adam Arvidsson and Kjetil Sandvik

Abstract

The primary mode of reception in computer games is play. This implies that the agency performed by computer players does not limit itself to the process of reading, but is constituted by a creative enactment of the structures of interactive actions and events inherent in the game. As such, gameplay may be regarded as a kind of (unpaid) immaterial labour, implying players' socialization, creativity, and a general intellect, that is, the ability to appropriate and rework the computer game as a work of culture. This article investigates the immaterial labour of computer players and discusses how this is being put to work by the game industry at different levels – as a means of producing fascinating game experiences and by means of including player agency as a productive force in game-design processes – thus connecting it to the economy of computer-game production.

Keywords

Computer game
Player-centred
design
Immaterial labour

The purpose of this article is to investigate the medium of the computer game not only as a cultural artefact, but also as an economic institution. Along with other observers like De Peuter and Dyer-Withford (2005) and Kline et al. (2003), we argue that the computer game provides a paradigmatic manifestation of the logic of contemporary media-saturated informational capital. This paradigmatic status derives chiefly from the fact that the value of a computer game builds primarily on its ability to appropriate and capture various forms of immaterial labour. As it has been developed by various thinkers over the recent decade such as Lazzarato (1997), Hardt and Negri (2004), and Gorz (2003), the term 'immaterial labour' has come to refer to those productive activities that rely primarily on an activation of linguistic, communicative and affective skills (Lazzarato 1997; Hardt and Negri 2004; Gorz 2003). It is a matter of putting to work the human capacity to create a common world by means of language (cf. Arendt 1958), as this capacity has been enhanced and shaped by various media technologies. As De Peuter and Dyer-Withford (2005) have shown, the production of computer games provides an almost ideal example of the position of paid immaterial labour within the informational economy.

Computer-game production is transnational and it relies on self-regulating productive networks. Labour is motivated by an ethic of enforced creativity and disciplinary freedom (in the sense that if you do not employ your freedom to be creative you have no career) and the end

1. *Majestic* was promoted as a game that would 'take over your life' and produce a game experience along the lines of what is experienced by Michael Douglas's character in David Fincher's *The Game* (1997), and even though the game flopped and was taken off the market shortly after its release *Majestic* forecasted the design trend called *pervasive gaming*, which creates gaming opportunities in the streets, offering a combination of tracking and location-based interaction, including cell phones with cameras, GPS and Internet access. A similar pervasive computer game (*In Memoriam* by Ubisoft) was released in 2004 with greater success including e-mails and surfing the Internet as part of the gameplay.

product is the outcome of the productive coordination of a complex communication process. In this article, we would like to suggest how computer games also provide an excellent illustration of the valorization of *unpaid* immaterial labour, the 'free labour' (Terranova 2000) of modders (players, who modify the game by, for example, hacking into the game's source code), fans and players in general. In this way, computer games illustrate an emerging general principle within the information economy: that consumers are increasingly positioned as a directly productive element within the valorization of media capital (Arvidsson 2006). In the conclusion we suggest how this entails a different view of 'consumer agency' than that traditionally put forth by twentieth-century cultural studies.

Mediatization, performativity and computer games

In their analysis of the political economy of computer games, Kline et al. (2003) argue that computer games should be understood as an 'ideal commodity' of the contemporary mode of production, as something that illustrates its very core logic (cf. Lee 1993). The centrality of the computer game to contemporary production is evidenced by the spectacular rise in the size of the computer-games industry (by now outstripping that of the film industry), by the dominant status of computer-game aesthetics in films like *The Matrix* (1999), *Lola Rennt* (1998), *Timecode* (2000), or *eXistenZ* (1999), by the computer game's importance to military applications like flight simulators and other types of computer-based training systems, and by the general 'conflation and confusion of war and game' that has led to 'the development and proliferation of wargaming in the United States' defense and foreign policies' (Der Derian 2003: 38). But this paradigmatic status is also and perhaps primarily illustrated by the technological form (Williams 1974) of the game medium itself.

First, computer games are part of the contemporary process of mediatization by means of which new spatial and temporal dimensions of life are opened up for commoditization. This is particularly clear when the computer game spreads from the PC or the game console (PlayStation, Xbox and so on) to other technological platforms (the portable console, the mobile phone or the PDA, or – even more significant – to the Internet) that make gaming possible in a much wider and more diverse range of situations, or when, as in the case of Electronic Arts' adventure game *Majestic* (2001), the gameplay includes taking clues from mysterious midnight phone calls, anonymous e-mails and faxes, and fake websites.¹ In these cases, the game platform tends to coincide with the contours of the life world itself.

Second, computer games not only interpellate (cf. Althusser 1984) their users as active subjects, but they make that agency contribute to the production of the very experience that they offer, and ultimately, a substantial share of the value of the game commodity. In short, computer games are performative, they position their users (that is, the players) as active subjects that must act in order to forward the gameplay. The performative aspect of gameplay is constituted by the fact that the player's reception and interpretations produce the game fiction. The game evolves in the sense that these user interpretations constantly make re-entries into

the game fiction enabling further player actions. Furthermore, computer games are operational in the sense that they create a more or less complete media environment in which that action can unfold and be pre-structured to varying degrees. They are a part of a machine-aided process of disciplinary attentiveness, embodied in practice (Crandall 2005).

We would like to suggest that these two central components of the technological form of the computer game – the activation of users and the creation of artificial operational environments – are neither separate phenomena, nor unique to computer games. Instead, they mark contemporary media culture in general, where they are intrinsically linked. The mediatization of the life world, the creation of mediatic environments of action (or we may say: play), is directly connected to the promotion of user agency and is encouraged by the primary media technology – the computer – at work. As an interactive medium, the computer (in all its forms and shapes) facilitates communication processes that differ from traditional one-way formats, in that the user has to take action in order to keep the communication going. This is particularly the case when it comes to the interplay between the user and the fictional universe of the computer game. As Pearce (2002) points out, the computer as a dynamic two-way medium makes it possible for game designers to create a ‘new narrative ideology’ in which the designer creates a narrative framework for the players’ own game-stories. He or she does not simply function as a storyteller in the traditional sense. This becomes particularly clear when it comes to so-called *massively multi-user online role-playing games* (MMORPGs). These games, according to Pearce, include both a *meta-story* in the shape of a pre-designed fiction world that contains a variety of storylines structured in a progressive form like a series of missions for the players to engage in, implying that the players attain higher levels of experience, and a *story-system* which enables the players to develop their own game-stories in a variety of events and campaigns initiated by game clans within the framework of this world. What we have here is a kind of user agency that is constituted by collective, collaborative and improvisational story production. It develops and evolves in real time for the players who are logged on to the game. This ‘real-time-ness’ enables a blurring of the line between the fictitious world of the game and the world of the player, thus making the game transgress into the player’s life world where social activities and communities are mediatized by means of chat channels, blogs, and clan websites related to the game (see below).

Historicizing consumer agency *per se* is a tricky task. It is clear that consumers, *qua* human beings have always possessed a capacity (and, one could argue, existential need) for creative reappropriation and re-elaboration. Consequently, historians and anthropologists have shown that most people, in most contexts, have made their own uses of consumer goods, media texts, or other kinds of objects that have entered into and circulated in their life worlds. If we add on the concept of mediatization, the task becomes simpler. It is clear the lion’s share of this everyday productivity has historically unfolded outside of the realm of media culture – the largely proprietary cultural universe centred on and chiefly mediated by electronic media (Kellner 1995). It has mostly been a matter of a popular culture that, because it has been based on earlier technologies of mediation

(like speech, print, and music) has appeared (to intellectuals) as more authentic or 'real'.

This relation also explains why twentieth-century observers largely regarded the spread of media culture as resulting in a pacification or standardization of popular culture. The lesson from cultural studies has in this respect been that the spread of media culture does not entail a pacification as much as a remediation of consumer agency. People are still productive in their everyday use of consumer goods and media texts, but in a way that unfolds within media culture. Their agency takes the form of a creative *bricolage* where bits and pieces of media culture are creatively recombined or reflexively redeployed to produce something new (Hebdidge 1979).

What characterizes contemporary, postmodern media culture is that the culture industries have come to recognize and utilize this everyday creativity as a productive externality. Contemporary media products increasingly expect or presuppose an active or creative attitude on the part of their consumers or users. To be a *bricoleur* is no longer so much an act of defiance (as it might have been in the 1970s) as much as it is an enactment of the expected attitude. If we add on contemporary processes of hyper-mediation by means of which everyday life comes to be inscribed within media culture – through new technologies of temporalization and spatialization like the mobile phone, new ubiquity of media discourses, from the omnipresence of television screens to the logos constantly visible on our bodies, to the new kind of media texts that provide a sort of mediatization of the habitus, acting as a resource for elaboration of our lifestyles and, increasingly, physical bodies – the result is that media culture works less as a spectacle to be admired at a distance and more as a sort of ambience that activates (Bocca-Artieri 2004). Media culture provides a series of such ambiances in which particular kinds of freedoms are more or less pre-structured and anticipated: where becoming a subject also entails valorizing, in some way, the products of the culture industries.

Immaterial labour and general intellect

The contemporary putting to work of subjectivity has perhaps been best understood within a theoretical discussion that has centred on a concept which, so far, has had very little of an impact on media studies: immaterial labour. The concept of immaterial labour refers, chiefly, to two things. First, activities involved in the increasingly central production of marketable but non-material goods, which can be a matter of the production of scientific, technological, or cultural knowledge, the business of 'knowledge workers' (Bell 1973), 'symbol analysis' (Reich 1991), or the 'creative class' (Florida 2005). It can be a matter of the production of care or of marketable experiences as in the labour of personal assistants, call-centre workers, or McDonald's employees. Second, immaterial labour can be a matter of the production of the relations of production themselves, as in the case of managers or members of self-steering groups or project themes. In all of these instances, immaterial labour relies chiefly on a putting to work of communicative and affective capacities: language (in the widest possible sense of the term) becomes the main means of production.

The productivity of immaterial labour thus depends on the productive potential of the particular 'language' (or, better, 'language game') that a particular worker employs. But the productivity of a particular language game is in turn dependent on the general development of the productive system to which it belongs. It is a matter of putting to work the know-how, the social competence, or the accumulated knowledge that have emerged historically within a particular productive network. Marx used the term 'general intellect' to refer to this productive potential inherent in a particular language game (Marx, 1973). The individual worker has access to this by virtue of his or her socialization within a particular productive system. Writing in the nineteenth century, Marx's example was large-scale industry. He observed that as the complexity of the productive system develops, the relative importance of the immaterial competences inherent to the social environment (the language game) of the factory increase. He reached the startling conclusion that 'to the degree that large industry develops, the creation of wealth comes to depend less on labour time and on the amount of labour employed, than on the power of the agencies set in motion during labour time' (Marx 1973: 706). What makes the worker productive is chiefly his socialization into the factory environment and, consequently his access to the particular form of general intellect that it has developed. Consequently, the most crucial productive resource of the factory environment was its ability to provide a particular kind of socialization, its ability to act as an ambience that promotes a particular kind of subjectivation.

Marx developed the concept of general intellect in relation to large-scale industry. He saw these generally available competences as mainly embodied in machinery and the social organization of the factory system. But it could be argued that the progressive socialization of capital has since produced a situation in which the general intellect comes to coincide with the linguistic environment of life itself. Paolo Virno (1996: 36) argues that today the general intellect chiefly presents itself as the 'linguistic interaction of living labour'.

Arguably, the main medium for the extension of the general intellect has been media culture. In this sense, media culture provides a series of competences that enable us to function as a productive moment of the extended production process that characterize the contemporary culture industries. Our socialization within media culture enables us to use consumer goods with the skill and competence that is necessary for the reproduction of a highly diversified demand and the abstraction of the specific kinds of measurable affect and attention that underpin increasingly important brand values (Arvidsson 2006). In short, media culture provides us with a particular kind of socialization that makes our agency valuable in relation to the reproduction of media capital. The other side to the bleak predictions of the Frankfurt School is this: a new kind of productive communality, and thus the emergence of a new kind of humanity within the context of media culture, enabled by the general intellect that it provides. This way, 'advertising and pornography, the mourners that accompanied humanity to its grave, are also the innocent midwives of its new incarnation' (Agamben 2001: 44).

The socialization of competent players

As in the case of the large-scale factory work that Marx theorized in the nineteenth century, or the flexible knowledge work of contemporary complex organizations (Maravelias 2003), it is clear that successful gaming (that is the playing of computer games) requires a particular kind of socialization. To pinpoint the main characteristics of computer games in this context, computer games may be described as fictional worlds in which the player is invited to take part as a major agent in the interactive structure of actions and events. The fiction (and we use the word 'fiction' to avoid the – within the field of computer-game studies – more biased word 'narrative') found in computer games presents itself as interactive and as 'play-centric' (Pearce 2002). Computer games are interactive in that they are constituted by interactions between a fictitious world and a plot structure (how ever complex and multithreaded) and a player's action within and in relation to this world and structure. They are play-centric in that this interaction between game and player is not limited to mere reading or watching, but must be played – that is, the player engages in some kind of role play (and we use the term 'role play' in a wider and more nuanced way than what is common in game studies, meaning the characteristics of the agency a given computer game expects from the player, see below).

Computer game fictions come in many shapes and forms – shoot'em ups, puzzles, strategy games, sports games, war games, combat games, and vast fictional online worlds that work as arenas for improvisation with player-designed characters. All of their differences aside they have one thing in common: role play and participation in some kind of story-producing process. They may be described as spatial structures (Manovich 2001) or as emergent structures, i.e. fictions with a storyline evolving and developing only due to the player's actions (Jenkins 2001). Or they may be regarded as dramatic narratives casting the player in the role of main character (Sandvik 2005). This is the case whether the player engages in playing the part of the space soldier in *Halo* (2001), the assassin in *Hitman* (2000), the adventuring heroine in *Tomb Raider* (1996), or if she steps into the role as creator of systems such as families, cities, empires as in *The Sims* (2000), *SimCity* (1987) or *Civilization* (1991). And in MMORPGs like *Ultima Online* (1997), *EverQuest* (1999), and *World of Warcraft* (2005) this role-playing mode has been extended to the degree that the player can create her own unique character using the creative tools the game has to offer. By using this unique character, she can create her own storylines together with other player characters and non-player characters (NPCs) within the framework of the game's fictional world.

Thus interactive and play-centric dramatic fictions imply a transformation of the recipient. From merely playing the role of a spectator to the dramatic story unfolding in front of her, she is offered a role within the fiction itself. Thus the interactive and play-centric fiction found in computer games dissolves the line between spectator and fiction, which is why it is not entirely correct to assume that interactive systems ('the computer as theatre') mimic a situation in which the audience members enter the stage and become actors (Laurel 1991: 16). It makes little sense to talk about actors and audience in the traditional sense. There is no point outside the game from which an audience is intended to watch and

therefore there is no one for an actor to act for. A game is not meant to be watched like a theatre performance. The central issue in a game is play. This involves different demands on the interactive and play-centric fiction than on traditional fictions, which are meant to be read or watched. Narrative contingency, psychological character development, depth in characters as well as story play to some extent a minor role compared to possibilities for the recipient to play a role within the story. The point is not to discover, reveal, or to read for the plot (cf. Brooks 1984), but *to play the plot*.

In order to function as a competent player, one has to have acquired both knowledge and skills which are generally available within the language game of computer games in general: one must be able to function as a 'social individual' within the world of computer games. This connects to the dyadic system of various game universes and interactive structures embedded in computer games that the player can influence. This structure of game universe and possible player actions is what we usually term a game's *gameplay*. Gameplay may be described as the pace and eye-and-hand coordination skills as well as the cognitive effort that the game requires of the player (Crawford 1997: 21). Different gameplay genres have demanded different sets of player qualifications throughout the history of computer games and thus have created traditions for the socialization of 'competent players'; action games require the ability to operate the game interface at a high speed and react in real time to the multitude of choices constantly presented by the game, while adventure games demand skills of pattern recognition, logical reasoning, puzzle solving and so on; strategy games build on a player's ability to construct and handle increasingly complex systems (a family, a city, an ecosystem, etc.). Even though the game genre landscape is much more complex now than when Chris Crawford formulated his trend-setting genres in *The Art of Computer Game Design* (1982), and contemporary game design tends to blend genres into action-adventure, action-role-playing, and real-time-strategy, classic notions of gameplay genres still play an important role when games are released and promoted. As such, a new game will always be released into a context constituted by gaming communities (groupings of different types of players that exchange experience and engage in different kinds of fan activities connected to certain games or certain types of game), as well as by the game tradition set by the historical development of different game genres, thus connecting the notion of gameplay genre to the concept of general intellect as something that 'unfolds in communicative interaction, under the guise of epistemic paradigms, dialogical performances, linguistic games' (Virno 1996: 65).

Game designer Richard Rouse (2001: xviii) defines gameplay as the one component in computer games that can be found in no other art form: interactivity. In the context of this article, however, we will claim that gameplay cannot be linked solely to the game's interactivity; gameplay is also connected to the game's fiction. Computer games may be described as both a system of rules and as fiction in that 'playing a [computer game] is to be engaged in the interaction with some real rules while imagining a fictional world' (Juul 2005: 2). However, rules are not only found in games and play-centric fictions. Even classic, closed and static non-interactive

2. Over the past few years, several studies have been published on innovation in games performed by players and on how this immaterial labour is appropriated by the game industry when it comes to so-called player-centred game design (see Postigo 2003; Sotamaa et al. 2005; Ermi and Mäyrä 2005; Sotamaa 2005; Kücklich 2005).

fictions set up rules for the reader or spectator concerning their conduct and how the fiction should be perceived: thus the novel, movie or theatre performance set up a 'contract of fiction'. In computer games, however, this contract of fiction is not limited to regulating the possible interpretations made by the reader or spectator, but includes rules governing how the player may interact with the game and its fiction and is as such imperative in order to make it possible for the player to play the game at all. The player must understand the rules of the gameplay in order to get a satisfactory game experience. As such, the rules of the gameplay constitute a visible and recognizable dramaturgy that enables the player to play. In game design, this recognition is ensured by the use of different matrixes within popular culture like genres (fantasy, horror, science fiction, etc.) or a well-known fictional universe (as seen in the large amount of computer games remediating film series like *Star Wars* (1977–), *Harry Potter* (2001–), *James Bond* (1962–), etc.). For example, in MMORPGs like *World of Warcraft*, *EverQuest* and *Ultima Online*, the use of the fantasy genre well-known from, for example, the universe of J.R.R. Tolkien functions as a structuring device, which evokes anticipations in the players regarding the characteristics of the fictitious world (its topology, its culture, character gallery and so on) and the possible ways to act within it. The competence to successfully engage in gameplay is thus not only a consequence of socialization within the particular universe of computer games, but derives from a general familiarity with media culture at large.

At the level of the particular game, players are socialized through a wide variety of strategies: voluminous manuals, extensive introduction sequences, informative cut-scenes, tutorial levels, and so on. In highly competitive games like action games, the possibilities for the player to get better at playing the game (pursuing 'high-score') are ensured by designers introducing 'save-game' functionalities which make it possible for the player to install points in the dramatic story that she can return to in case the development proves to be unfortunate (e.g. the player-character dies). In games that focus on some kind of collective story-producing process, the gameplay includes the possibility for the player to require important tools (acting techniques, dramaturgical competences, and so on) that are needed in order to create fiction. This is the case with MMORPGs. These games contain not only tools for creating and developing a character, but also different kinds of 'practice grounds' in which the players can try out their characters and certain possibilities for creating dramatic action. They are thus socialized into the game by the process of getting acquainted with the game rules, game interface, and game fiction.

Innovation

Once a potentially productive subject of computer players has been shaped, the players' productivity can be appropriated in largely two ways: namely, innovation and activation. Appropriation in the form of innovation usually takes place as particular groups of players are made to contribute actively to the narrative in the technological development of the game.² This is particularly prominent with what Aarseth (2004) calls 'hardcore players' who challenge the game design and explore its flaws (sometimes by

hacking into the source code itself). By doing, so they sometimes add to the game design.

Some games, such as [*Grand Theft Auto 3* (2001)] even reward the player for certain innovative moves, such as spectacular car jumps (stunts). The dialectic between player inventiveness and game designers' need to balance realism and playability in the simulation can be regarded as a major source of creativity on both sides. Players find the discovery of exploitable bugs and loopholes in the games highly rewarding, while designers see the experiments of explorers as a challenge to their ability to predict the simulation's unwanted side effects.

(Aarseth 2004: 5)

As such, the game industry values this kind of innovative immaterial labour performed by players and engages in 'active and constant dialogue between developers and gaming community', thus using the global gaming community as 'an inexpensive research and development team' (Sotamaa 2005a: 105).

Games can be open to player modification, or 'open-sourced' at two different levels: (1) they can be open-sourced at the level of graphics and visuals, allowing players to import themes and architecture, while at the bottom the code is a closed source; or (2) the game can be closed-sourced at the level of graphics, visuals and so on, and open-sourced at the game-engine or source-code level.³ Both levels connect to the concept of immaterial labour as well as the concept of general intellect understood as the human capacity to 'take bits from here and from there, to recompose multiply encoded and gated, broken, esoteric and public materials and information and make something of them' (Fuller 2006: 19).

The Sims is an excellent example of the first level of open-sourcedness. This game shows how game developers can make use of the unpaid immaterial labour of player innovation as a vehicle not only for developing game content, but also for promoting the game. Will Wright, the creator of *The Sims*, has explained this strategy as follows. Instead of making game demos and other types of promotion material, the game developers put all that extra effort into making player tools they could use. One of them was for creating custom characters, so people out there who just had some ability in Photoshop could draw in their favourite characters, you know, movie characters, superheroes, themselves, whatever. We had another one for doing things in the architecture realm, and these were mostly wallpaper patterns, floor patterns, stuff of that sort. And another one, well, basically, for actually generating a face. Now these three tools were all finished and delivered to the users months before we shipped the game. And so what we were trying to do is crystallize this user community around the game before we shipped. And in fact, the day we shipped, there were hundreds, if not thousands, of Sim objects available already on the player sites to download (Wright 2001).⁴

This strategy made use of the Internet as an enabling medium that allowed communities to form around the game using three different steps: first, the game developers contacted the webmasters that were running the ten biggest *Sim City* (another blockbuster Maxis-game) sites, and asked if they would be interested in promoting the game, and thus 'these became

3. Quoted from transcript of a paper given by artist and writer Anne-Marie Schleiner at the 'The audience takes charge: Game engines as creative tools' session of the 'Entertainment in the Interactive Age' Conference, Annenberg, USA, 29–30 January 2001, (<http://www.annenberg.edu/interactive-age/program.html#>).
4. Quoted from transcript of Will Wright's keynote address at the 'Entertainment in the Interactive Age' Conference, Annenberg, USA, 29–30 January 2001, (<http://www.annenberg.edu/interactive-age/program.html#>).

our really hard-core evangelists for the game' (Wright 2001). Second – about four months before the game was released – the game developers started releasing the tools described above, thus creating a situation where a lot of people were investing 'time and effort into building content for the game' (Wright 2001). Thus 90 per cent of the content implemented in the actual game was the result of player innovation. One of the larger user-innovation websites, Sims Resource, contained 2,400 custom characters to download, 800 pieces of furniture, 400 houses, 4,500 walls, and so on when the game was released in the year 2000. Finally – two months before the game was released – the game developers launched so-called web-cam events, in which the game was played by the developers 'in the office', uploaded small JPEGs on the Internet, updating them every 30 seconds. Here the future players of *The Sims* could see the game being played and by accessing a chat room 'tell us what to do'. Future players could also 'capture all these JPEGs', which 'gave them a tremendous amount of content, to then go develop their sites with':

So you have all these people basically writing your ad copy and pulling from a library of hundreds of screen shots, and making these elaborate web sites. [...] So on the day we released the game, we actually had about 50 big fan sites, we had about 250,000 people who bought the first build of the game [...], and we had about 50,000 players actually coming to our site, getting downloads every day.

(Wright 2001)

On the second level of 'open-sourcedness' we find games that allow players to model new games using the core game programs, that is, the game engine itself. Thus players can use, for example, the *Far Cry* (2004) game engine to build new games, and a list of the best *Far Cry* modifications is featured on the game's official website. As in the case with *Deus Ex* (2000), hardcore explorer players use the 'Deus Ex' tool kit to build their own game worlds, and the game developers (Ion Storm) provide the service of viewing players' design documents, giving e-mail advice on the approaches they are taking and the gameplay styles they are introducing and so on. Along the same line, *Neverwinter Nights* (2000) is entirely based around the concept of user-editable content and tools. Here the player truly becomes designer.

The most famous example of this user innovation is the creation of *Counter-Strike* (2000), which came into being when devoted players performed a global open-source modification of the *Half-Life* (1998) source code which was provided by the developers (Valve Software), earning the modders (Mihh Le and Jess Cliffe) fame as well as fortune in that they were both hired by Valve Software to design *Counter-Strike: Condition Zero* (2004). Valve Software itself earned a fortune, since *Counter-Strike* has been sold in 'more than 1.5 million copies in boxed form even though you can download the same thing for free' (*Computer Gaming World* 2004). In this case, the game experience not only includes the creation of game content and game design, but also indeed makes way for gameplay as a profit-producing activity.

For some time now, players have been auctioning game characters and items (like houses and weaponry) for considerable sums of money on

Internet sites like eBay. This has led to the emergence of web shops (like GamePal) that specialize in trading online game characters, weapons, buildings – some of which are sold at high prices, like the space station ‘Asteroid Space Resort’ in the online game *Project Entropia/Entropia Universe* (2003), which earned its creator the sum of 70,000 dollars (Thomsen 2005). With an economy in a game like *EverQuest* the size of a Third World country, economist Edward Castranova (2001, 2005) has pointed out that the laws of commerce have entered into the online game industry with companies specializing in the creation and sale of elements like game characters using cheap labour from eastern Europe and Asia as developers. The market for game characters and items has become so big that

Far East groups such as South Korea’s ItemBay [...] boast 1.5 million customers and a turnover of nearly £10 million per month. These retailers specialize in a practice known as ‘gold farming’ or ‘mining’. By employing cheap labour or automated tools, they pay players to gather gold and magic items within the game for little cost, then auction them in the real world at a healthy profit.

(*Times Online* 2005)

And of course crime has also entered into this picture with players launching Trojan Horses to loot other players’ accounts and players (not characters!) killing other players for stealing valuable – yet immaterial – items as was the case with two Chinese players playing the MMORPG *The Legend of Mir* (1999) (*Times Online* 2005). The innovative processes in which players engage can thus reach far beyond the context of the game itself, and off-game communicative networks can become important aspects of the individual player’s subjectivation process more generally. The innovative productivity of gameplay can sometimes come to coincide with the creativity (or destructiveness) of life itself.

Activation

As ‘activation’, the process of making use of player’s activity as immaterial labour is different and more subtle. The point here is not to capture the innovative edge but rather the great mass of computer players. In a sense, this great mass agency is positioned as a sort of natural resource to which the reproduction or the value of the game is ‘farmed out’. Here the trick is to provide a particular kind of mediatic ambience that quite naturally makes user agency evolve in particular directions. It is a matter of promoting highly particular and situated forms of freedom that spontaneously produce the kinds of commoditized ‘content’ for which one can charge an access fee. The most prominent examples of this approach are MMORPGs.

This story-producing gameplay mode has been found in MUDs for years, but in today’s game design, it is found in its most profound version in large games like *EverQuest*, *Ultima Online* and *World of Warcraft*. These user-initiated events range from the ongoing development of the life and doings of player characters to great events like weddings, festivals and huge battle campaigns. The game designers encourage this user-created content by setting up announcement boards on the game website and by

implementation of the chat function which also works as a channel for communicating about events taking place.

The organizing of players into guilds, clans, and alliances is another way for the designers of these online games to encourage user-created content: the games are designed in such a way that the storylines encourage cooperation and competition, and the quests and challenges the player has to face on the higher levels of the games are so demanding that she must team up with other players in order to succeed. And thus, a variety of clans and guilds spawn from the gameplay, and they initiate their own websites where they develop their own stories, elaborate on stories from the games themselves, and plan new game events. Some of these player communities may even operate within several games (see, for example *The Syndicate* at <http://www.llst.org/uo1.html>).

The 'activation' of computer players can be exemplified by looking at how gameplay is working in an online role-playing game like *Ultima Online*. In *Ultima Online*, the role-playing mode has been extended to the degree that the player can create her own unique character using the creative tools the game has to offer. By using this character, she can create her own storylines together with other player-characters and NPCs (non-player characters) within the framework of the fictitious world of Britannia. The player creates her character either from pre-described templates (magician, warrior, blacksmith, etc.) and develops it from there, or she can create the character 'from scratch' using the tools for character design integrated in the game.

The character works like a paper doll, in which the player not only chooses the clothing, but the character's looks (colour of hair, eyes, skin, its sex) and skills (ability to fight, to cast spells, to heal, and so on). With this 'new-born' character, the player enters the game and the fiction world to develop its characteristics, its life, social status, wealth, social relations, and so on, making it perform a role in the different storylines, which emerges due to interactive improvisation with the fiction world and the other characters in it.

An important part of the fascination of the game is that the player is invited to 'possess' the fiction and by experimenting with the possible ways in which the storylines and the characters may evolve, participate in its development. The social dimension of a MMORPG is constituted partly by working together within the fiction framework and partly by players who go outside the fiction (and out of character) to discuss the possibilities for changes and new storylines inside the game's fiction. These players go on to exchange experiences and stories on the multitude of websites surrounding the game or by using the game's chat channel. This kind of social player activity both in character and out of character is an important part of what makes the game intriguing and is encouraged by the game designers in the sense that great missions in the upper experience levels of the game necessitates that players make their characters join forces in clans and guilds.

However, this does not imply that the creation of necessary fictions is handed over to the players altogether. The popularity of *World of Warcraft*, for example, compared to more open-ended creative tools like *Active Worlds* (1995) and *Second Life* (2003), suggests that there is a need for an

efficient framework as well as efficient rules to guide the players' interaction with and within the interactive and play-centric fiction and further, this must secure some kind of progression. Interactivity is not interesting in itself, it seems: some kind of progression that creates dramatic suspense and development and which encourages the players to partake in the story-creating process must be embedded in a game design. Part of this progression entails developing the life of the player-character by gaining experience and skills in a process known as 'levelling', that is, the players invest the experience points earned by slaying monsters and completing quests to '[boost] their avatar's abilities, develop combat skills or learn special powers' (*Times Online* 2005).

Developing relations with other characters inside the game as well as with players beyond the game contribute to the game's necessary progression, and further creates possibilities for a player to embark on exciting and dangerous missions. This is why MMORPGs like *Ultima Online* and *EverQuest* constantly require attention from their designers and also why 'customer service staff' members wander 'about the virtual game world assisting players, and creating narrative events, conflicts and missions for players to engage in' (Pearce 2002). These customer service staff members closely observe the players' activities, developing the game's rules and meta-stories according to these actions. They also use the players' reports to address flaws and inconsistencies in the program code running the game.

Conclusion

As the above examples have shown, the commercial value (as well as the use-value) of computer games is to a large extent produced by the immaterial labour of gamers. As co-designers or co-developers, as performers of gameplay, or as participants in clans or communities, gamers put their social and affective energies to work in generating a product that can be successfully appropriated and valorized by the computer-game industry. Often these productive practices reach far into the life world of gamers. Their participation in communities or the experiences they have in artificial game worlds can become important constitutive elements of who they are. It is in this way that computer games open up an additional layer of subjectivation where (some of) the existential need to produce a subjectivity that marks post-traditional societies can (hopefully) be met. But this forging of a self through cognitive and affective alliances with others is also a form of labour: it produces the very game experience, content and gameplay that make up the most valuable components of the game commodity. This way, the becoming of subjectivity and the becoming of value coincides. By relying heavily on the immaterial labour of users, the game industry illustrates the key logic of an emerging informational capitalism: the recourse to productive externalities as a primary source of surplus value. As Morriz Suzuki put it in relation to informational capitalism in general: 'the direct exploitation of labour is becoming less important as a source of profit, and the private exploitation of social knowledge is becoming more important' (Suzuki 1997: 64).

From the point of view of the game industry, the creative practices of users appear as an undifferentiated mass of players and other kinds of

actors. The key to appropriating its productive energies is to create a particular environment of subjectivation – gameplay – which in turn fosters a particular kind of agency. This particular pre-structured pattern of agency is subsequently farmed out to, and (hopefully) reproduced by, the gaming public. The game consists in a proprietary form of patterned freedoms, which is put to pasture in the social, where it grows more valuable and more real as it is enacted. This way, agency no longer constitutes an external element, a point of critique or resistance in itself, as it did for twentieth-century cultural studies. Rather, it is a partly pre-structured internal element to the extended production process of the computer game as informational capital. Agency has been internalized and, to some extent, socialized within capital itself. The problem from the point of view of the game industry is not that of repressing or disciplining a naturally antagonistic external element (as was the case for the nineteenth-century industrial capitalist), but that of ensuring that the forms of agency that it itself promotes are not put to autonomous or undesirable uses: that autonomous circuits of self-valorization do not emerge.

This inclusion of agency within the circuit of capital – as a sort of programmed freedom – poses an important challenge for contemporary cultural studies. This discipline developed within a historical situation where agency and freedom could be taken as sources of resistance against the logic of capital, particularly as expressed by the culture industries. In the case of computer games, as well as, increasingly, informational capitalism in general, this is no longer the case. Agency has become a pre-programmed feature of the commoditized media environment where subjectivation occurs: indeed it is put to work as a source of agency. Freedom is similarly anticipated as the expected attitude of productive subjects. In this situation cultural studies, or any discipline that wishes to maintain a critical edge, must clearly abandon the habit of equating agency and freedom with resistance and critique. A more productive way might be to investigate the ways in which freedom and agency are actually put to work: how the production of value has come to directly build on and subsume the becoming of subjectivity. This article has attempted to take one step in that direction.

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